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10/598,046

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Richard Statham

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HESLIN ROTHENBERG FARLEY & MESITI PC  
5 COLUMBIA CIRCLE  
ALBANY, NY 12203

EXAMINER

DRIGGERS-FOURNET, GWENDOLYN

ART UNIT

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/598,046	<b>Applicant(s)</b> STATHAM ET AL.	
	<b>Examiner</b> Gwendolyn D. Fournet	<b>Art Unit</b> 3679	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 December 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-17 and 20-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☒ Claim(s) 20-24 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 August 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☒ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/20/07</u> .  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

This communication is a first office action on the merits. Claims 1-17, and 20-24, as amended, are currently pending and have been considered below.

#### ***Priority***

1. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in the United Kingdom on 2/17/04. It is noted, however, that applicant has not filed a certified copy of the patent application as required by 35 U.S.C. 119(b).

#### ***Drawings***

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the electro fusion wire of claim 8, the induction heating coil of claim 9, and "the stepped portions of the collars arrange face to face" and "a common swaging bung" of claim 17 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate

Art Unit: 3679

changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

3. Claim 22 is objected to because of the following informalities:

In line 2, "energising" should be changed to read --energizing--.

Appropriate correction is required.

4. Claims 20-24 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from another multiple dependent claim. See MPEP § 608.01(n). Accordingly, the claims have not been further treated on the merits.

### ***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

6. In claim 1, line 10, it is unclear how the washer is flanged since it appears to be a flat disc and “flanged” typically denotes a projecting portion, usually a rim or collar or ring, of a component. Is there a projecting rim or collar on the washer that is not shown or described in the specification? Or does Applicant intend that the weld shown in figure 2b is a flange on the washer? Or does Applicant intend that the washer itself forms a flange on the sleeve? Or something else altogether?

Further, in claim 4 lines 3-4, it is unclear how the matting forms the flanged portion of the washer. How can a material form a flange or projection on the metal washer that is illustrated in figure 2b? The figure seems to indicate that the matting (25) merely covers the washer. How does covering the washer constitute forming a flange?

Applicant must make clear in the claim language that which he/she considers their invention.

7. In claim 3, it is unclear how the “one or more” undulations in line 3 are both circumferentially arranged and longitudinally extending. From the disclosure, the undulations seem to be grooves which extend around the circumference of the inner diameter of the sleeve. However, it is unclear how these undulations longitudinally extend along the sleeve's inner surface when only one undulation is present. Does Applicant intend that the undulations are arranged next to one another when there are

Art Unit: 3679

multiple undulations? Or can just one undulation extend longitudinally? If so, how?

Applicant must make clear what is meant by this language.

8. Claim 16 recites the limitation "the flange" in line 3. There is insufficient antecedent basis for this limitation in the claim.

9. The remainder of the claims listed are rejected as depending from a rejected claim.

### ***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

12. Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Boudry et al (US 2007/0057504; hereinafter Boudry).

Art Unit: 3679

Regarding claim 1, Boudry discloses a coupling assembly (122) for sealing an interface between a pipe (119) and a sump wall (700), the assembly comprising;

a sleeve (133) configured to be inserted in an aperture in a sump wall and having a bore suitable for receiving a collar (124) (see figure 10);

a collar (131) configured to be received between the sleeve and the pipe, being fusible with the pipe (see figure 10 at (146)) and having a stepped internal diameter for receiving a swaging bung (see figure 10 which illustrates the internal diameter is capable of receiving a bung like (33) in figure 2),

at least one flanged washer (145) having a diameter sized to fit the outside diameter of the sleeve (see figure 10) and comprising at least in part a material which is leak tight bondable to the material of the sump wall (paragraph [0167] which discloses that a glass fibre mat can be applied over the flanges to create a fluid tight seal).

Boudry fails to explicitly disclose in the embodiment of figure 10 a swaging bung configured to be received in the stepped portion of the internal diameter of the collar and configured to receive a pipe.

However, Boudry discloses in a separate embodiment a swaging bung (33) configured to be received in the stepped portion of the internal diameter of the collar and configured to receive a pipe (see figures 2 and 10 which illustrate that sleeve (33) is capable of receiving a pipe and also capable of being received in the stepped portion of collar (124) near (138)).

Therefore, from the teachings of Boudry, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the pipe to wall fitting in

Art Unit: 3679

Boudry to include a swaging bung as taught in a separate embodiment in order to prevent the collar from withdrawing away from the sleeve in the event of shrinkage or softening of the components (paragraph [0113]).

Regarding claim 2, Boudry further discloses the sleeve comprises a metal (paragraph [0153] lines 4-5).

Regarding claim 3, Boudry further discloses the sleeve has in diametrical cross section along its inner surface one or more circumferentially arranged, longitudinally extending undulations (paragraph [0160] which discloses ridges can be formed on either sleeve in the region where they overlap).

Regarding claim 4, Boudry further discloses the flanged washer comprises a metal washer element (145) and a matting of leak tight bondable material which can be positioned over the washer and sleeve to form the flanged portion of the washer (paragraph [0167] which discloses that a GRP mat can be applied over the flanges to create a fluid tight seal).

Regarding claim 5, Boudry further discloses the flanged washer comprises a unitary piece of leak tight bondable material (145) (see the cross hatching in figure 10 which indicates metal).



Art Unit: 3679

Regarding claim 6, Boudry further discloses an O-ring seated in an O-ring groove provided on an inner surface of the sleeve (paragraph [0161] which discloses an o-ring may be positioned in an annular channel located around the circumference of either of the sleeves).

Regarding claim 7, Boudry further discloses the collar comprises a thermoplastic material (paragraph [0153] which discloses fitting (131) is plastic).

Regarding claim 8, Boudry further discloses the collar further includes an electro-fusion wire (146) embedded in the thermoplastic material.

Regarding claim 9, Boudry further discloses the collar further includes an induction heating coil (146) embedded in the thermoplastic material (paragraph [0155] discloses that wires (146) are heating wires and figure 10 illustrates the wires are in the shape of a coil).

Regarding claim 10, Boudry further discloses the leak proof bondable material comprises the same material as a sump to which it is intended to be bonded (paragraph [0101] which discloses the sump chamber is GRP).

Art Unit: 3679

Regarding claim 11, Boudry further discloses the leak proof bondable material comprises a fibre reinforced plastic, optionally a glass reinforced plastic (GRP) (paragraph [0167] which discloses a GRP mat).

Regarding claim 12, Boudry further discloses the leak proof bondable material is impregnated or coated with a bonding resin (paragraph [0171] which discloses the flanges are bonded to the sump wall via the GRP resin).

Regarding claims 13-17, Boudry discloses all the structural elements of the claimed invention as recited in claim 1, but fails to explicitly disclose in the embodiment of figure 10, per claim 13, two flanged washers; per claim 14, the second washer is provided in a floating configuration so that it can be correctly positioned and secured in position on site; per claim 15, the second washer has associated therewith a mechanical locking device; per claim 16, the mechanical locking device comprises a thread on the outer diameter of the sleeve and a complimentary flange nut for screwing onto the flange; and per claim 17, the assembly comprises a pair of collars, one of the pair being insertable in each of two opposing ends of the sleeve with the stepped portions of the collars arranged face to face and a common swaging bung configured to fit between the two collars.

However, Boudry discloses in a separate embodiment, per claim 13, two flanged washers (246, 247).

Boudry further discloses in a separate embodiment, per claim 14, the second washer is provided in a floating configuration so that it can be correctly positioned and secured in position on site (see figure 12 which illustrates that the flanges are subsequently connected via threading (248, 249)).

Boudry further discloses in a separate embodiment, per claim 15, the second washer has associated therewith a mechanical locking device (paragraph [0185] discloses that the flange may have a collar with an extended screw-threaded region).

Boudry further discloses in a separate embodiment, per claim 16, the mechanical locking device comprises a thread on the outer diameter of the sleeve (248, 249) and a complimentary flange nut for screwing onto the flange (paragraph [0185] discloses that the flange may have a collar with an extended screw-threaded region which screws onto a projecting portion of the sleeve).

Boudry further discloses in a separate embodiment, per claim 17, the assembly comprises a pair of collars (230, 232), one of the pair being insertable in each of two opposing ends of the sleeve (231) with the stepped portions of the collars arranged face to face (see figure 12).

However, Boudry discloses in a third embodiment a common swaging bung (33) configured to fit between the two collars (see figures 2 and 12 which illustrate that sleeve (33) is capable of being received between the collars (230, 232)).

Therefore, from the teachings of Boudry, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the pipe-to-wall fitting in Boudry to include duplicated components and a common swaging bung as taught in

Art Unit: 3679

separate embodiments since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art (*St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8), and in order to prevent the collar from withdrawing away from the sleeve in the event of shrinkage or softening of the components (paragraph [0113]).

### ***Conclusion***

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: see attached Notice of References Cited (form PTO-892).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gwendolyn D. FOURNET whose telephone number is (571)270-5740. The examiner can normally be reached on Mon-Thurs 7:30a-6:00p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571)272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3679

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Gwendolyn D. Fournet  
/GDF/  
Examiner, Art Unit 3679  
08/17/10

/James M Hewitt/  
Primary Examiner, Art Unit 3679